



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
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October 10, 2008

Mr. Mark Prescott, Chief  
Deepwater Ports Standards Division (CG-3PSO-5)  
United States Coast Guard Headquarters  
2100 Second Street, S.W.  
Washington, D.C. 20593

Subject: Bienville Offshore Energy Terminal Final Environmental Impact Statement;  
Docket Number: USCG-2006-24644; CEQ: 20080305; ERP: CGD-E02013-AL

Dear Mr. Prescott:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the U. S. Coast Guard's (USCG) Final Environmental Impact Statement (FEIS) for the Bienville Offshore Energy Terminal. Under Section 309 of the CAA, EPA is responsible for reviewing and commenting on major federal actions significantly affecting the quality of the human environment. In addition, EPA is a cooperating agency for this project. EPA's review of the FEIS focuses on the responses to EPA's Draft EIS comments and the additional technical information regarding the environmental impacts of the facility. As you know, TORP Terminal L.P. (the applicant) has applied to EPA for National Pollutant Discharge Elimination System (NPDES) and CAA permits for this facility, proposed to be located 63 miles offshore of Alabama in federal waters of the Gulf of Mexico (GOM).

After reviewing the FEIS and the responses to our earlier comments, EPA remains concerned about potential impacts on marine fish larvae and hard bottom habitats identified by the National Marine Fisheries Service (NMFS). According to the evaluation conducted by NMFS, marine resources -- ichthyoplankton (fish eggs and larvae) and other planktonic forms and larval life stages -- would be significantly impacted by the operation of the facility at both the intake and discharge points. The applicant's proposed "HiLoad" open-loop warming technology relies entirely on GOM water and would, over time, intake and entrain large volumes of marine ichthyoplankton and other plankton. The proposed warming technology would discharge cold water back into ambient GOM waters, which could entrain and cold-shock marine life (plankton and juveniles) in the discharge plume, potentially causing lethal or sublethal effects.

We commend the USCG on its efforts to improve coordination with environmental agencies. These efforts have resulted in considerable improvement in the FEIS's assessment of discharge entrainment impacts. However, we believe the overall impacts to ichthyoplankton and the ultimate long-term effects on GOM fishery resources continue to be underestimated because there is no impact factor applied to the myriad of

species beyond the four selected representative species covered in detail. Additionally, the aggregation of eggs and larvae have indirect fishery value to the marine food web regardless of whether or not they survive to maturity or are consumed by predators.

These concerns emphasize the need for implementation of an effective prevention, monitoring and mitigation plan as an integral aspect of the proposed project. EPA recommends that the Record of Decision (ROD) and any future license require the applicant to work with relevant Federal and State resource agencies, including EPA, to implement a comprehensive prevention, monitoring, and mitigation plan. Using adaptive management measures, if monitoring reveals that impacts exceed established baseline conditions, the applicant would then be required to undertake design and operational modifications to respond to identified impacts. Among possible conditions that EPA recommends would be recognition of the possible need to cease operation or convert to an alternative re-gasification technology. We also recommend that compensatory mitigation be required for adverse fishery impacts resulting from the operation of the terminal.

The potential for impacts to hard bottom habitats is substantial as a result of the proposed port site being within the Pinnacle Trends, a protected marine habitat designated by the Minerals Management Service. While surveys of the port site indicate that it does not contain high relief pinnacles, there are low relief pinnacles present. Further, all 23 miles of proposed interconnecting pipeline would be entirely within the 70-lease block Pinnacle Trends, making it difficult to avoid damage of these topographic features during construction. The associated repositioning and repetitive anchoring of the pipe-lay barge over this distance makes avoidance of Pinnacle features problematic.

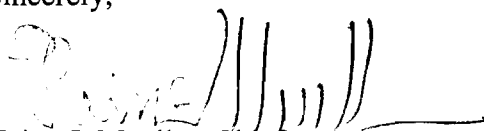
The USCG evaluated a reasonable array of alternative vaporization technologies in the EIS with an adequate level of detail. The closed-loop submerged combustion vaporization (SCV) alternative was evaluated and found to meet the USCG's feasibility criteria. Based on the EIS evaluation, EPA agrees that SCV on an expanded fixed platform would represent a reasonable alternative with less potential for adverse impact to the marine environment than the proposed Hi-Load shell-and-tube open-loop system. Moreover, based on our analysis of the FEIS, impacts to marine resources and air quality could be further reduced or nearly eliminated through the use of ambient air vaporization (AAV) technology, if such alternative is determined to be reasonably available. Because it requires only an auxiliary combustion heat source, AAV substantially lowers air emissions compared to all other vaporization alternatives. Based upon the information presented in the FEIS, EPA recommends that the USCG further consider identification of the AAV technology alternative in the ROD as the environmentally preferable alternative.

Also based on our review of the FEIS, EPA has determined that the responses to our other comments concerning the alternatives review criteria, air quality, water quality, risk of spills, and impacts to other constituents of the marine community are satisfactory. Although the document identifies numerous types of mitigation for various environmental impacts, there are few mitigation measures addressing expected losses of

ichthyoplankton eggs and larvae. The FEIS, however, fully considered marine life exclusion alternatives, EPA supports the use of the proposed small mesh wedge-wire screens on the seawater intakes for the gas vaporizers. The screens could be of some benefit in excluding ichthyoplankton larger than the proposed mesh size.

In summary, EPA's environmental objections to the proposed project remain unchanged, and our August 20, 2007, comments on the Draft EIS define the objections in detail. Thank you for the opportunity to review and comment on this FEIS. We look forward to working with USCG and MARAD staff and representatives of the applicant to ensure an environmentally acceptable outcome. If you wish to discuss EPA's comments, please contact me at 404/562-9611 ([mueller.heinz@epa.gov](mailto:mueller.heinz@epa.gov)) or Ted Bisterfeld of my staff at 404/562-9621 ([bisterfeld.ted@epa.gov](mailto:bisterfeld.ted@epa.gov))

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", followed by a horizontal line.

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

cc: MARAD  
NMFS, St. Petersburg